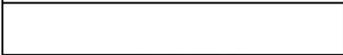
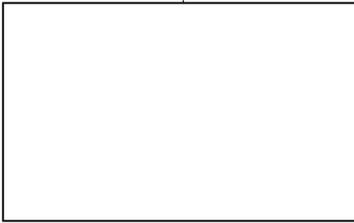


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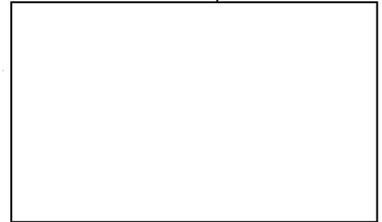
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## NATIONAL INTELLIGENCE ESTIMATE

NUMBER 13-5-66

# Communist China's Economic Prospects

Submitted by

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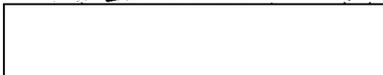
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## COMMUNIST CHINA'S ECONOMIC PROSPECTS

### THE PROBLEM

This estimate focuses on the two factors which dominate the economic scene in Communist China: a huge and rapidly growing population living close to the margin of bare subsistence, and the regime's determination to invest in costly weapons programs.

### NOTE

We noted in NIE 13-64, "Economic Prospects for Communist China" (28 January 1964), that the information available for an appraisal of the Chinese Communist economy is fragmentary, uneven in coverage, and uncertain as to reliability. There has been no significant improvement; although open-source information is currently supplying somewhat more data on production trends, these data are still spotty and consist mainly of percentage increases over an unknown base. A major intelligence collection effort is focused on this target, and continuing efforts are made to increase its effectiveness.

### CONCLUSIONS

A. Communist China has managed in the past five years to pull the economy back from the brink of catastrophe and has made progress in its programs to acquire modern weapons.

B. The Vietnam conflict has not yet added serious strains to the Chinese economy. However, a sustained increase in the level of fighting in Vietnam, if accompanied by a comparable rise in Chinese assistance as well as significant defensive measures within China itself, would add greatly to China's economic problems.

C. In any event, the Chinese economy faces slow growth, at best, over the next few years. The primary causes will be lagging agricultural production and a burgeoning population, but these problems will

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be complicated by the ambitious military program and by the inefficiencies brought on by Peking's ideology. In agriculture, despite somewhat greater support in the last few years, the regime is still not doing enough to achieve the yields necessary for sustained economic growth. Since Peking's birth control program will have little early effect, population pressure on the food supply will increase over the next decade. This narrow food margin makes the economy highly vulnerable to bad crop conditions. Moreover, growing competition for resources in China's sluggish and nonresilient economy seems likely gradually to undermine economic stability.

D. In the face of even a critical food emergency, the present regime would probably make only grudging and piecemeal cuts in its military programs. Although China will continue to be a dangerous and growing military threat, we believe that some future Chinese leadership will be forced to a fundamental concentration on China's economic problems.

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## DISCUSSION

### I. CURRENT PERFORMANCE AND POLICY

1. Peking's economic policies have remained largely unaltered since the drastic retrenchment which followed the collapse of the Leap Forward. The caution shown by the leadership reflects the nearness of disaster in 1960-1961 and the continuing constraints on the depressed economy. Peking's habit of taking intransigent political stands has reduced the possibility of outside aid, thus forcing the regime to make a virtue of "self-reliance." Long-range planning was abandoned when the Leap Forward was launched in 1958 and has never since been undertaken; what little we know about the Third Five-Year Plan (1966-1970) suggests that it is a long way from being adequately formulated.

2. Communist China has managed in the past five years to pull the economy back from the brink of catastrophe and has made progress in its programs to acquire modern weapons. The leadership has clearly not given up its hopes of becoming a modern world power. Nevertheless, Peking's plans are increasingly being phrased in terms of the long, hard road to economic development; Vice Premier Chen Yi recently declared that it will take China 30 to 50 years to become truly a strong power.

#### A. Agriculture

3. Our difficulties in estimating the size of China's grain harvest are apparently shared by the Chinese, who told Edgar Snow in September 1964 that they would be satisfied if their estimates were accurate within 10 percent. We believe that grain output in 1965 showed little if any improvement over the mediocre harvests of 1963 and 1964. Official statements make only modest claims for total agricultural production and ignore the original target of a five percent increase. Whatever the precise level of the 1965 harvests, it seems clear that there has been no abatement of the Malthusian pressure on food supplies nor any significant increase in the ability of agriculture to contribute to industrial growth.

4. The firmest indication of agricultural difficulties remains the import of Western grain, which has averaged between 5 and 6 million tons annually since 1961, at a cost of about \$400 million a year. Some of the imported wheat replaces rice exported by the regime, and some may be used to build up reserves. Nevertheless, Peking would not continue the net expenditure of scarce foreign exchange at such a high rate if the grain were not a vital, current need. Evidence available on food consumption within China also tends to support our estimate that grain production is now about what it was in 1957. Diets have improved over the low point of 1960-1961, but this improvement is due mainly to increased production of non-grain foods, primarily from the private plots restored to the peasants following the food emergency in 1960-1961. This contribution, together with scheduled grain imports, should prevent any serious deterioration in the food supply over the winter of 1965-1966.

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5. The leadership has been careful not to imperil food supplies by any abrupt cutback in the limited freedoms and incentives granted the peasants. But there has been no tendency to encourage a further expansion of peasant freedoms. On the contrary, Peking is showing considerable concern over "re-surgent capitalism" in the rural areas, and unless threatened by another food crisis is unlikely to make further retreats from collectivization. Nor does it appear that Peking's well publicized priority for agriculture is backed up by significantly increased quantities of scarce resources. "Self-reliance" is still extolled as the key to agriculture's problems, and despite obvious official concern over the lag we see no evidence of investment in fertilizer plants and modern farming techniques on the scale required for substantial increases in crop yields.

### **B. Industry**

6. Industry continues to recover slowly from the collapse of the Leap Forward. From fragmentary data, it appears that output in heavy industry in 1965 may have reached a level somewhat higher than that of 1958, but still below the peak of 1959-1960. Light industry, due to the lack of raw materials caused by the prolonged slump in agriculture, may be producing below 1957 levels. The steel, cement, and other building-material industries still have some idle capacity. However, the unbalanced development and the chaotic allocation procedures that characterized the Leap Forward have been steadily rectified. Current production processes are therefore better coordinated and less likely to suffer stoppages due to conflicting directives and raw material shortages.

7. Such improvement has been general, but production has increased sharply in only a few high priority areas, particularly petroleum and chemical fertilizers. Production of crude oil increased at an annual rate of over 15 percent from 1962 through 1965. Because of tight controls, consumption of petroleum increased at an annual rate of about five percent, allowing the regime to reduce its dependence on imports. At present, China is almost self-sufficient in petroleum products. Military aircraft, which are predominantly jet, are being supplied with domestically produced jet fuel at levels adequate for peacetime needs, thus largely eliminating the earlier dependence on the Soviet Union. China still needs to import some high quality lubricants and aviation gasoline, but this dependence is minor, since non-jet aircraft are a small and declining part of China's aircraft inventory.

8. Production of chemical fertilizer increased during 1964 and 1965 by about 25 percent annually. However, much of this increase comes from new plants that have just come into production after protracted periods of construction, and few major new fertilizer plants are now being built. Recent emphasis appears to be on small- and medium-size plants, incapable of turning out many of the more productive types of fertilizer.

### **C. Military Production**

9. With few exceptions, the major military items produced by China are of Soviet design and are made in factories supplied in whole or in part by the

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USSR prior to 1960. Despite the high priority given the work, the Chinese are still striving to get production started on a number of weapons which were part of the pre-1960 package of Soviet assistance—notably MRBM and SAM systems and, possibly, jet bombers. There has been a substantial increase of MIG 19s in the Chinese inventory over the past year and a half. [redacted]

[redacted] China's most spectacular success has been the explosion of two nuclear devices. Construction of Soviet-designed submarines, following a two-year hiatus, was resumed in 1962 or 1963.

10. The modern weapons program is not only monopolizing a large number of scarce scientific/technical personnel, but is also using industrial resources that are crucial for the gradual modernization of the Chinese economy. China has met some of its needs for high quality material by imports and by improvising with domestic materials. The military electronics program, for instance, has done quite well despite heavy import requirements for raw materials such as mica, quartz, and high-purity copper. One of the most serious deficiencies is China's limited ability to produce a broad range of alloy and special steels. Another deficiency is in such nonferrous refractory metals as molybdenum, tungsten, columbium, and beryllium.

11. The principal impact of support for the military program has been on the machine-building industry; many plants have shifted to custom production for the specialized equipment needed at such facilities as aircraft plants, nuclear reactors, and oil refineries. Compounding the problem has been the need for China to obtain from non-Soviet sources, or to produce itself, the instrumentation, controls, and other components that earlier were largely obtained from the Soviets. There have been growing purchases of precision and specialized types of machine tools from the West. Although COCOM regulations have resulted in denials of some strategic machine tools to China, the embargo list of production equipment has been narrowed to cover only a few types of machine tools explicitly designed for military use.

12. The Chinese chemical industry appears better able to support an advanced weapons program than the metallurgical and machine-building industries. China either produces or is able to import most of the chemicals needed for its fissionable material and nuclear weapons programs, [redacted]

[redacted] China also has the capability to produce double-based solid propellants, liquid propellants such as liquid oxygen, and high-strength nitric acid in moderate quantities. China produces adequate amounts of such liquid fuels as alcohol and kerosene, but only small amounts of such efficient fuels as hydrazine and the amines.

#### D. Foreign Trade and Aid

13. China's foreign trade continues to recover from the slump that followed the Leap Forward and the split with the Soviets. Although over-all foreign trade is still below the 1959 peak of \$4.3 billion, it grew by 18 percent during

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1964 and probably grew at about this rate in 1965. Trade with the USSR fell 25 percent in 1964 to a level of \$450 million but may have risen somewhat in 1965. Sino-Japanese trade doubled in 1964 and probably increased by some 50 percent in 1965. Japan now rivals the USSR as China's principal trade partner. China's trade with the Free World reached a record high in 1965, accounting for about two-thirds of China's total trade. Despite this growth, China's trade with the Free World continues to be hindered by Peking's limited export capabilities and reserves of foreign exchange. In 1965, Hong Kong supplied China with about \$525-550 million in foreign exchange, about one-half of total Chinese earnings of Free World currencies. Although the Chinese have engaged in extensive shopping tours in Western Europe and Japan, actual orders for industrial plants and machinery have thus far amounted to only a fraction of earlier purchases from the Soviets.

14. Grain continues to dominate China's imports, amounting to about one-third of the total. Machinery imports have climbed from \$135 million in 1963 to \$200 million in 1964, but are still far below the nearly \$1 billion imported in 1959. Contracts for imports of chemical fertilizer totaled \$140 million in 1965, up from \$60 million in 1964. In order to pay for its imports, China is exporting a rising volume of commodities. Textiles remain the single most important item, with exports of \$450 million in 1964. Exports of machinery and light industrial products, excluding textiles, were about 75 percent higher in 1964 than in 1960. Mineral exports, which could be a good earner on the favorable international market, continue to lag.

15. Peking has continued its foreign aid program despite its economic difficulties. Credits extended to underdeveloped countries of the Free World totaled \$340 million in 1964, though actual drawings were only \$23 million. However, drawings on the Chinese aid program customarily lag. This is partly because aid extensions are announced for propaganda purposes long before there is any intention of implementing them, partly because the underdeveloped recipient countries lack the capacity to absorb aid, partly because the Chinese material and equipment available for aid programs is not particularly desirable. Hence, Peking's aid program for the non-Communist countries remains relatively modest in terms of actual outlay, and as yet constitutes only a small drain on the economy. Communist countries have been the main recipients of Chinese aid, with the largest shares going to North Vietnam, North Korea, and Albania.

#### E. Chinese Support to North Vietnam

16. China's military and economic aid to North Vietnam rose sharply in 1965; in July, China authorized additional grants of "equipment, whole sets of installations, and supplies in the national defense and economic fields," and a loan agreement signed in mid-December will increase the aid figure further, by an amount as yet unspecified. The increase in aid shipments, together with Soviet aid shipped through China, caused some congestion and delay on certain segments of China's rail system. North Vietnam's military production is quite

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insignificant and practically all weapons and ammunition must be imported. We believe that Communist China furnishes most of the small arms and small arms ammunition and many of the trucks, while the USSR is supplying most of the other combat material. We believe that China has increased its shipments of construction materials, rails, trucks, and spare parts to replace losses suffered in air attacks against North Vietnam. In addition, China has sent additional technicians and construction engineers to aid the North Vietnamese.

17. The increased tempo of the Vietnamese fighting has also resulted in a greater effort on the part of the Chinese to enhance their own military and logistical capabilities in southern China. Construction of five new airfields and expansion of two others has been carried out under obviously high priorities during 1965. Railroad construction has focused on the effort to connect Southwest China with the main Chinese rail net, thus eliminating the need to ship goods via North Vietnam. This is the only major main line construction now underway in China's rail system. Despite difficult terrain necessitating extensive tunnelling, it is likely that Yunnan Province will be directly linked to the main rail net in 1966. Road construction in Yunnan and Tibet has continued at a sustained pace since the 1950s. The Vietnam conflict has not yet added serious strains to the Chinese economy. But a sustained increase in the level of fighting in Vietnam, if accompanied by a comparable rise in Chinese assistance as well as significant defensive measures within China itself, would add greatly to China's economic problems.

## II. PROBLEMS

### A. The Food-Population Problem

18. The crisis of 1960-1961 showed China's leaders that the pressure of population on food supplies can shake the stability of the country and even threaten the regime's control. Despite subsequent improvement in food supplies, grain output over the past three years has averaged no better than the 180 million tons produced in 1957, when there were some 100 million fewer people to feed. If the population continues to grow at the estimated rate of about 2¼ percent a year, grain output would have to be boosted over 50 percent by 1975 to regain the per capita level of grain available in 1957.

19. The regime is no longer confident that the increasing demand can be met by increased production. It has swallowed its Marxist scruples and committed itself to a program of birth control. Thus far the government has stressed indoctrination but has also experimented with various economic and social sanctions against large families. It has encouraged late marriage, the spacing of births through the use of contraceptives or abortion, and sterilization after the birth of three children. Peking has shown strong interest in new developments such as oral contraceptives and intra-uterine devices and is clearly seeking an inexpensive, convenient technique that will depend as little as possible on individual motivation.

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20. The present program is not likely to have any near-term effect on the birth rate. Traditional attitudes are changing in urban areas among the younger generation, but there is little evidence of progress in the rural areas, which include about 85 percent of the population. The peasants are conservative in family matters, and a decade or two will probably elapse before the campaign has any significant effect on the growth of the rural population. Even if the birth control program achieves some success over the next decade or two, further declines in mortality will exert an upward pressure on the rate of population growth. Even the new contraceptive techniques offer no solution unless Peking can at the same time reorient individual attitudes, a process that in all other countries has depended on the remolding forces of urbanization and industrialization, still remote prospects for China. Outright coercion also seems unlikely; the practical difficulties of such a program would be enormous, and Peking seems to have concluded that there are limits to how far it can safely push the people.

21. We believe that prospects for sharp improvements in food production are remote. There are unlikely to be further substantial increases in the production of subsidiary foods from the private plots, because the regime shows no intention of shifting additional collective land into private cultivation. The food necessary to keep pace with population growth will therefore have to be obtained from increasing the output of grain on collective land. Having already acknowledged that growth in food production will be dependent on increased yields and not on expansion of acreage, Peking now faces the hard and expensive task of boosting yields through modernization of agricultural techniques.

22. Although the Chinese see the need for technological innovations in agriculture, it is doubtful that they fully appreciate the tremendous outlays of materials and capital that will be required over a considerable period of time. Slight increases in yields can be obtained from better management, improved seed varieties, and reestablishment of crop rotation practices. Peking has constructed extensive water conservancy and irrigation works, but significant expansion of these programs is becoming increasingly costly for the returns involved. Hence, further major increases in output will require increased application of chemical fertilizers. This is probably the most important—and the most expensive—item required for sustained increase in grain output. In spite of the priority given fertilizer production, the program remains grossly inadequate to support the large expansion in grain yields that will be needed.\* We estimate that in 1975, 50 million tons of chemical fertilizer would be required to regain the per capita level of grain available in 1957, even assuming considerable success in the birth control program. This projected requirement for fertilizer is 10 times current production and would require large diversions from other

\* Use of chemical fertilizers in China, as compared to Taiwan and Japan, is shown by the following figures (kilograms per planted hectare):

China .....	10
Taiwan .....	110
Japan .....	230

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programs. We see no indication that China's leaders mean to embark on a program of this magnitude.

23. Moreover, the experience of such countries as Japan and Taiwan demonstrates that fertilizer by itself will not provide a panacea for China's agricultural problems. If increased supplies of chemical fertilizers are to yield maximum results, new varieties of fertilizer-responsive seed must be used, together with more pesticides; better use must be made of available water supplies; and general agricultural practices must improve. Japan and Taiwan needed over 50 years to build up the scientific foundation for their present high productivity in agriculture. Although the Chinese have recognized the need to modernize their practices, the long, tedious agricultural extension work necessary for encouraging scientific farming is often shunted aside by the regime in its obsession with quick, inexpensive palliatives.

24. Military conquest for the primary purpose of acquiring nearby grain surplus lands does not offer an attractive alternative. The only area on China's periphery producing a regular surplus is the Southeast Asian peninsula; in recent years this surplus has been less than five million tons, which is a smaller amount than China now buys abroad.

25. Even unusually good weather would bring no long-term benefit on yields. If the weather were comparable to that of 1959-1961, however, the regime would be exposed to a repetition of the extensive malnutrition that occurred at that time. As in this earlier food crisis, Peking would face a demoralized population whose energies were inadequate for normal work requirements and whose discipline would be eroded by the threat of starvation. As the Chinese documents captured in Tibet showed so clearly, in 1960-1961 even the military could not be shielded from the general unrest. Although outbreaks of violence during this period were not widespread, they were sufficiently serious to lead Peking to make unprecedented concessions to private initiative.

#### **B. Agricultural Support for Economic Growth**

26. The current lag in agriculture has other equally serious implications for economic growth. The depressed agricultural sector currently offers neither sufficient funds for domestic investment nor sufficient export earnings to finance large-scale imports of capital equipment. The loss in export earnings is most dramatic in the foodstuffs trade, in which China earned \$820 million in net exports during 1959. By contrast, in 1964 it had to import a net \$200 million of food, a swing of over \$1 billion. This was a major factor in the fall of imports of machinery and equipment from about \$1 billion in 1959 to \$200 million in 1964. With only limited foreign exchange reserves—estimated at about \$400 million at the end of 1965—increased imports of industrial equipment must be paid for by current exports. Credits from the Free World would ease this problem but are not likely to be available in large amounts or favorable terms.

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### C. Impact of the Military Program on the Economy

27. As the Chinese move into quantity production and deployment of modern weapons, they will find that direct economic costs will increase sharply, even though they can avoid some expense by relying on research and development work done by others. Moreover, they will find that many of the weapons which the Soviet-supplied plants were designed to produce have become outdated. As they move further away from the time when they received Soviet support and must depend more on original research and development, progress will be slower and more expensive. The Chinese will also discover what far wealthier and more highly developed countries have learned: that progress in modern weaponry almost invariably is on a steeply rising cost curve and requires ever-broader scientific and industrial bases.

28. The main adverse impact of the military programs on the economy is that they use high-quality manpower, equipment, and materials that might otherwise foster economic growth. While China's resources of technical manpower are sufficient for progress toward relatively narrow objectives, the assignment of a large proportion of these resources to military research and development has almost certainly retarded the introduction of new technology in industry. Nevertheless, the regime probably will remain willing to pay a high price for military research and production unless and until forced by such pressing problems as food production to direct more of its economic energies elsewhere.

### III. THE OUTLOOK

29. In short, the intensifying food/population problem will be increasingly complicated by the diversion of talent and resources, notably to military programs. This circumstance will confront Peking with a series of progressively more difficult choices. The present Chinese leaders show little inclination to scale down their ambitions for modern military power or to make significant doctrinal concessions in favor of material incentives and economic efficiency. The intensification of this competition for resources in China's sluggish and non-resilient economy seems likely gradually to undermine economic stability and could eventually bring China to a condition of crisis.

30. We do not mean to imply that China will not continue to be a dangerous and growing military threat. In the face of even a critical food emergency, the present Chinese leaders would probably make only grudging and piecemeal cuts in their military program. We believe, however, that some future Chinese leadership will be forced by the persistent Malthusian pressures to a fundamental concentration on China's economic problems.

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